## Claims

5

10

15

20

25

1. An optimum lease auction method by using a network through which a lessor receives a payment from a lessee and an auction item is leased, the optimum lease auction method comprising the steps of:

connecting a first terminal of a lease-wanted person, a second terminal of a rent-wanted person, an auction trading intermediary server installed with an intermediary program, an insurance agency and a settlement agency to the network including the internet;

inputting lease-related information including an item to be leased, a lease schedule, lease conditions, evaluation particulars, evaluation methods, evaluation reference marks and evaluation priority ranks as the lease-wanted person is connected to the auction trading intermediary server, whereby a central processing device of the auction trading intermediary server stores the inputted lease-related information into a lease database of a database constructed within a memory;

searching for the stored lease-related information in the lease database as the rent-wanted person is connected to the auction trading intermediary server and inputting rent-related information on desired conditions, whereby the central processing device stores the rent-related information

into a rent database of the database;

5

10

15

20

25

analyzing the lease database and the rent database and configuring a probable lease combination for every number of cases by the central processing device which, in turn, evaluates an optimum lease auction that maximizes a profit of the lessor who initiates the auction according to one of overall evaluation marks and the evaluation priority ranks, selects an optimum bidder as a successful bidder and stores information on the successful bidder into an evaluation database of the database;

displaying an evaluation result on a monitor and searching for a member database to inform the lessor/lessee of the evaluation result through an e-mail, an advanced record system (ARS) service and a short message service (SMS) by using the central processing device;

verifying a bidding result and inputting a decision on the auction trade by using the first/second terminal, whereby the central processing device stores a contract between the lessor and the lessee into a contract database of the database;

transmitting information on verification that a lease payment including a security deposit is settled and the item to be leased is transferred from the insurance agency, the settlement agency and the first/second terminal of the lessor/lessee to the auction trading intermediary server,

whereby the central processing device displays the information on verification on monitors of the settlement agency, the insurance agency and the first/second terminal and stores the information on verification into a trading database of the database;

searching for the lease database and the contract database, displaying a search result if an available lease period remains and performing a next auction event by the central processing device;

transmitting information on verification that item to be leased is transferred to one of the lessor and a next lessee from the first/second terminal to the auction trading intermediary server, whereby the central processing device displays an auction result and stores a trading completion database of the database; and

searching for the trading completion database, analyzing the contract database and the trading completion database if an unsettled trading exists, calculating a final amount of the lease, settling a balance of the lease, storing the settlement into a settlement database of the database, displaying a settlement result on monitors of the insurance agency, the settlement agency, the lessor and the lessee and informing of the settlement result through an e-mail, an ARS service, a SMS by the central processing device.

20

5

10

5

10

15

20

25

2. The optimum lease auction method of claim 1, wherein the lease-related information, the rent-related information and a status of an auction proceeding are displayed in a schedule table in the form of a calendar which is constructed into a database stored into the intermediary program of the auction trading intermediary server; when the lease-wanted person inputs a schedule of the lease during inputting the lease-related information, the central processing device analyzes the inputted schedule, displays a corresponding schedule table and requests the lease-wanted person to input the lease-related information; when the lease-wanted person registers the lease-related information including the lease conditions and the evaluation methods, the central processing device stores the lease-related information into the lease database of the database installed within the memory; and when the rent-wanted person participating in the auction inputs the rent-related information, the central processing device displays the schedule table stored into the lease database, requests the rent-wanted person to input the rentrelated information, stores the rent-related information inputted into the schedule table into the rent database, displays auction-related information including a status of an auction proceeding and a status of an evaluation on the schedule table, which is displayed in real-time to users of the network, so that the central processing device is capable

of controlling the auction trading to be carried out under the schedule table.

5

10

15

20

25

3. The optimum lease auction method of claim 1, wherein when the lease-wanted person separately assigns a lease determination date for each desired lease date when inputting the lease-related information or discretionarily sets the lease determination date prior to a predetermined date, the processing terminates auction device individual assigned lease sequentially by applying the determination date as a basic reference; when each applied renting date applied by the rent-wanted person is consecutive or inconsecutive within a range of a preset transfer period of the item to be leased, said each applied renting date is treated as one rent application and a first starting date is determined as a representative date of a consecutive renting period for which a lease determination period is applied conjointly; and when the applied renting dates by a number of rent-wanted people are overlapped with each other and are affected with each other, the central processing device controls the lease determination date of the corresponding rent-wanted people to be set at the lease determination date of a rent-wanted person assigned with a first precedent lease determination date among the rent-wanted people in order to apply a relative comparative evaluation with respect to

conditions of the corresponding rent-wanted people according to a predetermined reference mark, so that an optimum lessee is evaluated and selected by flexibly adjusting the lease determination dates set by the lease-wanted person according to the applications of the rent-wanted people.

5

10

15

20

25

ownership of the item.

- 4. The optimum lease auction method of claim 1, wherein when the lease-wanted person inputs a piece of lease-related information by setting a condition of a lessee to have a final ownership of the item to be leased without returning the item to the lessor in consideration of depreciation of the item, the central processing device stores the piece of lease-related information into the lease database, evaluates the rent-wanted people and selects the lessee, thereby completing the lease activity and then, searches for the trading completion database to discover a lessee who matches with the essential assets stored in the lease database, and if such lessee is verified, the central processing device controls the selection of the lessee who has the final
- 5. The optimum lease auction method of claim 1, wherein when the lease-wanted person inputs a piece of information on reference transfer and collection methods for the item to be leased due to consecutiveness of the lease, the central

processing device stores the piece of information into the lease database, evaluates the rent-wanted people and selects one lessee and then, analyzes the conditions of the rent-wanted people stored in the rent database and the transfer and collection methods stored in the lease database to determine whether the item is first returned to the lessor and then, transferred to a next lessee or a precedent lessee transfers the item directly to the next lessee and afterwards, stores the determination result into a transfer database of the database within the memory and displays the transfer and collection methods to the lessor and the selected lessee both being informed of the transfer and collection methods through an e-mail, an ARS and a SMS, so that the item to be leased is controlled to be transferred and collected according to the preset condition.

6. The optimum lease auction method of claim 1, wherein when the lease-wanted person inputs a condition of the lease trading in that the lease takes place over an entire available lease period without a restriction or for each divided period of the entire available lease period and various other lease conditions including a lease period, a unit price based on the lease period, a lowest lease price, a minimum lease period, a surcharge rate and a discount rate and evaluation methods, the central processing device stores

the inputted condition of the lease trading, the various other lease conditions and the evaluation methods into the lease database, allows the rent-wanted people to re-divide one of the entire available lease period and the divided periods as much as necessary and selects the re-divided period; and when the rent-wanted person inputs rent-related information, the central processing device stores the rent-related information into the rent database and evaluates a status of the bidding in overall according to each separated condition to allow one of a person and a combined group providing an optimum condition to be selected as a successful bidder.

7. The optimum lease auction method of claim 1, wherein the intermediary program is prepared with a program and icons for allowing the lease-wanted person to modify the lease-related information during the auction, and when the lease-wanted person selects one of the program and the icons, the central processing device analyzes a status of the auction proceeding and displays a status of lease information on periods with no rent-wanted person and no contract as modifiable while maintaining the precedent contract with the same lease condition and then, requests the lease-wanted person to modify the lease-related information and stores the modified lease-related information into the lease database as

the lease-wanted person modifies the lease-related information including the lease conditions, the evaluation methods and the lease schedule, so that the auction is controlled to be carried out under the modified lease-related information.

5

10

15

20

25

8. An optimum reverse auction method by using a network through which a buyer purchases an item by paying a price to a seller, the optimum auction method comprising the steps of:

connecting a first terminal of the buyer, a second terminal of the seller and an auction trading intermediary server installed with an intermediary program to the network;

inputting purchase-related information including an item to purchase, essential specifications, purchase conditions, evaluation particulars, evaluation methods and evaluation reference marks as the first terminal of the buyer is connected to the auction trading intermediary server, whereby a central processing device of the auction trading intermediary server stores the purchase-related information into a purchase database;

searching for the purchase-related information stored in the purchase database as the second terminal of the seller is connected to the auction trading intermediary server and then inputting sale-related information with respect to the purchase-related information, whereby the central processing

device stores the sale-related information into a sale database;

analyzing the purchase database and the sale database and performing an optimum reverse auction evaluation over proposed conditions of potential sellers participated in the auction until reaching an auction termination point by the central processing device, thereby selecting an optimum bidder who is close to the purchase condition set by the buyer who initiates the auction or is able to maximize a profit of the buyer by minimizing a purchase cost as a successful bidder according to one of overall evaluation marks and priority evaluation ranks and storing information on the optimum bidder into an evaluation database;

5

10

15

20

25

displaying an evaluation result on a monitor, searching for a member database and informing the buyer/seller of the evaluation result through an e-mail, an advanced record system (ARS) service and a short message service (SMS) by the central processing device;

verifying a bidding result and input ting a decision on a trading by using the first/second terminal of the buyer/seller, whereby the central processing device stores a contract into a contract database; and

transmitting information on verification that a purchasing price is settled and the item to purchase is transferred from the first/second terminal of the

buyer/seller to the auction trading intermediary server, whereby the central processing device displays the transmitted information, which is stored into a trading database, and informs the buyer/seller of the transmitted information through an e-mail, an ARS and a SMS.

5

10

15

20

25

9. An optimum reverse auction method by using a network through which a seller sells an item by paying a price to a buyer, the optimum auction method comprising the steps of:

connecting a first terminal of the seller, a second terminal of the buyer and an auction trading intermediary server installed with an intermediary program to the network;

inputting sale-related information including an item to sell, major specifications, sale conditions, evaluation particulars, evaluation methods and evaluation reference marks as the first terminal of the seller is connected to the auction trading intermediary server, whereby a central processing device of the auction trading intermediary server stores the sale-related information into a sale database;

searching for the sale-related information stored in the sale database as the second terminal of the buyer is connected to the auction trading intermediary server and then inputting purchase-related information with respect to the sale-related information, whereby the central processing device stores the purchase-related information into a

purchase database;

5

10

15

20

25

analyzing the sale database and the purchase database and performing an optimum reverse auction evaluation over proposed conditions of potential buyers participated in the auction until reaching an auction termination point by the central processing device, thereby selecting an optimum bidder who is close to the sale condition set by the seller who initiates the auction or is able to maximize a profit of the seller by minimizing a sale cost as a successful bidder according to one of overall evaluation marks and priority evaluation ranks and storing information on the optimum bidder into an evaluation database;

displaying an evaluation result on a monitor, searching for a member database and informing the seller/buyer of the evaluation result through an e-mail, an advanced record system (ARS) service and a short message service (SMS) by the central processing device;

verifying a bidding result and inputting a decision on a trading by using the first/second terminal of the seller/buyer, whereby the central processing device stores a contract into a contract database; and

transmitting information on verification that a sale price is settled and the item to sell is transferred from the first/second terminal of the seller/buyer to the auction trading intermediary server, whereby the central processing

device displays the transmitted information, which is stored into a trading database, and informs the seller/buyer of the transmitted information through an e-mail, an ARS and a SMS.

10. An optimum reverse auction method by using a network through which a buyer purchases an item by receiving a payment from a seller, the optimum auction method comprising the steps of:

5

10

15

20

25

connecting a first terminal of the buyer, a second terminal of the seller and an auction trading intermediary server installed with an intermediary program to the network;

inputting purchase-related information including an item to purchase, essential specifications, purchase conditions, evaluation particulars, evaluation methods and evaluation reference marks as the first terminal of the buyer is connected to the auction trading intermediary server, whereby a central processing device of the auction trading intermediary server stores the purchase-related information into a purchase database;

searching for the purchase-related information stored in the purchase database as the second terminal of the seller is connected to the auction trading intermediary server and then inputting sale-related information with respect to the purchase-related information, whereby the central processing device stores the sale-related information into a sale

database;

5

10

15

20

25

analyzing the purchase database and the sale database and performing an optimum reverse auction evaluation over proposed conditions of potential sellers participated in the auction until reaching an auction termination point by the central processing device, thereby selecting an optimum bidder who is close to the purchase condition set by the buyer who initiates the auction or is able to maximize a profit of the buyer by maximizing a purchase cost as a successful bidder according to one of overall evaluation marks and priority evaluation ranks and storing information on the optimum bidder into an evaluation database;

displaying an evaluation result on a monitor, searching for a member database and informing the buyer/seller of the evaluation result through an e-mail, an advanced record system (ARS) service and a short message service (SMS) by the central processing device;

verifying a bidding result and inputting a decision on a trading by using the first/second terminal of the buyer/seller, whereby the central processing device stores a contract into a contract database; and

transmitting information on verification that a purchasing price is settled and the item to purchase is transferred from the first/second terminal of the buyer/seller to the auction trading intermediary server,

whereby the central processing device displays the transmitted information, which is stored into a trading database, and informs the buyer/seller of the transmitted information through an e-mail, an ARS and a SMS.

5

11. An optimum reverse lease auction method by using a network through which a lessee who initiates an auction pays a price to a lessor to rent an item to be auctioned, the optimum auction method comprising the steps of:

10

connecting a first terminal of a rent-wanted person and a second terminal of a lease-wanted person, an auction trading intermediary server installed with an intermediary program to the network;

15

inputting rent-related information including an item to rent, renting conditions, evaluation particulars, evaluation methods and evaluation reference marks as the rent-wanted person is connected to the auction trading intermediary server, whereby a central processing device of the auction trading intermediary server stores the inputted rent-related information into a database for setting a hire of things;

20

25

searching for the information stored in the database for setting the hire of things as the lease-wanted person is connected to the auction trading intermediary server and inputting information on proposals for the hire of things, whereby the central processing device stores the information

of the proposals for the hire of things into a database for requesting the hire of things;

5

10

15

20

25

analyzing the database for setting the hire of things and the database for requesting the hire of things and configuring a combination of probable hire of things for every number of cases by the central processing device, which, in turn, evaluates an optimum reverse release auction that close to the desired renting conditions of the lessee or maximizes a profit of the lessee who initiates the auction by minimizing a renting cost according to one of overall evaluation marks and evaluation priority ranks, calculates an optimum bid combination including one of a certain group and an individual to be selected as a successful bidder and information on the successful bidder stores into an evaluation database;

displaying an evaluation result on a monitor and searching for a member database to inform the lessor/lessee of the evaluation result through an e-mail, an advanced record system (ARS) service and a short message service (SMS);

verifying a bidding result and inputting a decision on a trading by the lessor/lessee with use of the first/second terminal and storing a contract between the lessor and the lessee into a contract database of the database by the central processing device;

transmitting information on verification that a payment including a security deposit is settled and the item for the hire of things is transferred from an insurance agency, a settlement agency and the first/second terminal of the lessor/lessee to the auction trading intermediary server, whereby the central processing device displays the information on verification on monitors of the settlement agency, the insurance agency and the first/second terminal and stores the information on verification into a trading database of the database;

5

10

15

20

25

searching for the database for setting the hire of things and the trading database, displaying a search result if an available period for the hire of things remains and performing a next auction event by the central processing device;

transmitting information on verification that item for the hire of things is transferred to one of the lessor and a next lessee from the first/second terminal of the lessor/next lessee to the auction trading intermediary server, whereby the central processing device displays an auction result and stores a trading completion database of the database; and

searching for the trading completion database, analyzing the contract database and the trading completion database if an unsettled trading exists, calculating a final amount of the hire of things, settling a balance of the hire

of things, storing the settlement into a settlement database of the database, displaying the settlement result on monitors of the insurance agency, the settlement agency, the lessor and the lessee and informing of the settlement result through an e-mail, an ARS service, a SMS by the central processing device.

5

10

15

20

25

12. An optimum reverse lease auction method by using a network through which a lessor who initiates an auction pays a price to a lessee to lease an item to be auctioned, the optimum auction method comprising the steps of:

connecting a first terminal of a lease-wanted person and a second terminal of a rent-wanted person, an auction trading intermediary server installed with an intermediary program to the network;

inputting lease-related information including an item to be leased, lease conditions, evaluation particulars, evaluation methods and evaluation reference marks as the lease-wanted person is connected to the auction trading intermediary server, whereby a central processing device of the auction trading intermediary server stores the inputted lease-related information into a database for setting a hire of things;

searching for the information stored in the database for setting the hire of things as the rent-wanted person is

connected to the auction trading intermediary server and inputting information on proposals for the hire of things, whereby the central processing device stores the information of the proposals for the hire of things into a database for requesting the hire of things;

5

10

15

20

25

analyzing the database for setting the hire of things and the database for requesting the hire of things and configuring a probable lease combination for every number of cases by the central processing device, which, in turn, evaluates an optimum reverse release auction that close to the desired lease conditions of the lessor or maximizes a profit of the lessor who initiates the auction by minimizing a lease cost according to one of overall evaluation marks and evaluation priority ranks, calculates an optimum bid combination including one of a certain group and an individual to be selected as a successful bidder and stores information on the successful bidder into an evaluation database;

displaying an evaluation result on a monitor and searching for a member database to inform the lessor/lessee of the evaluation result through an e-mail, an advanced record system (ARS) service and a short message service (SMS);

verifying a bidding result and inputting a decision on the auction trade by the lessor/lessee with use of the

first/second terminal and storing a contract between the lessor and the lessee into a contract database of the database by the central processing device;

5

10

15

20

transmitting information on verification that a payment including a security deposit is settled and the item for the hire of things is transferred from an insurance agency, a settlement agency and the first/second terminal of the lessor/lessee to the auction trading intermediary server, whereby the central processing device displays the information on verification on monitors of the settlement agency, the insurance agency and the first/second terminal and stores the information on verification into a trading database of the database;

searching for the database for setting the hire of things and the trading database, displaying a search result if an available period for the hire of things remains and performing a next auction event by the central processing device;

transmitting information on verification that item for the hire of things is transferred to one of the lessor and a next lessee from the first/second terminal of the lessor/next lessee to the auction trading intermediary server, whereby the central processing device displays an auction result and stores a trading completion database of the database; and

63

25 searching for the trading completion database,

analyzing the contract database and the trading completion database if an unsettled trading exists, calculating a final amount of the hire of things, settling a balance of the hire of things, storing the settlement into a settlement database of the database, displaying the settlement result on monitors of the insurance agency, the settlement agency, the lessor and the lessee and informing of the settlement result through an e-mail, an ARS service, a SMS by the central processing device.

10

15

5

13. An optimum reverse lease auction method by using a network through which a lessee who initiates an auction receives a payment from a lessor to rent an item to be auctioned, the optimum auction method comprising the steps of:

connecting a first terminal of a rent-wanted person and a second terminal of a lease-wanted person, an auction trading intermediary server installed with an intermediary program to the network;

20

25

inputting rent-related information including an item to rent, renting conditions, evaluation particulars, evaluation methods and evaluation reference marks as the rent-wanted person is connected to the auction trading intermediary server, whereby a central processing device of the auction trading intermediary server stores the inputted rent-related

information into a database for setting a hire of things;

searching for the information stored in the database for setting the hire of things as the lease-wanted person is connected to the auction trading intermediary server and inputting information on proposals for the hire of things, whereby the central processing device stores the information of the proposals for the hire of things into a database for requesting the hire of things;

5

10

15

20

25

analyzing the database for setting the hire of things and the database for requesting the hire of things and configuring a combination of probable hire of things for every number of cases by the central processing device, which, in turn, evaluates an optimum reverse lease auction that close to the desired renting conditions of the lessee or maximizes a profit of the lessee who initiates the auction according to one of overall evaluation marks and evaluation priority ranks, calculates an optimum bid combination including one of a certain group and an individual to be selected as a successful bidder and stores information on the successful bidder into an evaluation database;

displaying an evaluation result on a monitor and searching for a member database to inform the lessor/lessee of the evaluation result through an e-mail, an advanced record system (ARS) service and a short message service (SMS);

verifying a bidding result and inputting a decision on the auction trade by the lessor/lessee with use of the first/second terminal and storing a contract between the lessor and the lessee into a contract database of the database by the central processing device;

5

10

15

20

25

transmitting information on verification that a payment including a security deposit is settled and the item for the hire of things is transferred from an insurance agency, a settlement agency and the first/second terminal of the lessor/lessee to the auction trading intermediary server, whereby the central processing device displays the information on verification on monitors of the settlement agency, the insurance agency and the first/second terminal and stores the information on verification into a trading database of the database;

searching for the database for setting the hire of things and the trading database, displaying a search result if an available period for the hire of things remains and performing a next auction event by the central processing device;

transmitting information on verification that item for the hire of things is transferred to one of the lessor and a next lessee from the first/second terminal of the lessor/next lessee to the auction trading intermediary server, whereby the central processing device displays an auction result and

stores a trading completion database of the database; and searching for the trading completion database, analyzing the contract database and the trading completion database if an unsettled trading exists, calculating a final amount of the hire of things, settling a balance of the hire of things, storing the settlement into a settlement database of the database, displaying the settlement result on monitors of the insurance agency, the settlement agency, the lessor and the lessee and informing of the settlement result through an e-mail, an ARS service, a SMS by the central processing device.

14. The optimum reverse auction method of claims 8 to 13, wherein the auction trading is carried out by using an overall evaluation marking table showing a major status of the auction condition, the evaluation particulars, the evaluation methods, overall scores of participants in the auction, and as a check-up, the auction participant is allowed to simulate the auction in real-time by inputting a proposal to be inputted in an actual auction event before the auction participant applies to the actual auction event and afterwards, a virtual evaluation unit allowing the auction participants to apply for a bid is constructed into a predetermined database.

5

10

15